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WILEY, REIN & FIELDING

1776 K STREET, N.W.
WASHINGTON, D.C. 20006
(202) 429-7000

May 19, 1995

WRITER'S DIRECT DIAL NUMBER
202-828-7506

FACSIMILE
(202) 429-7049

HAND DELIVERY

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, NW
Washington, DC 20554

Re: CC Docket No. 92-297
Ex Parte Presentation

Dear Mr. Caton:

On May 19, 1995, representatives of Texas Instruments, Inc., met with Ms. Lisa B. Smith of Commissioner Barrett's staff, Ms. Jill M. Luckett of Commissioner Chong's staff, and Mr. David R. Siddall of Commissioner Ness' staff, on matters related to the pending proceeding in CC Docket No. 92-297. Texas Instruments was represented by Gene Robinson, Bob Pettit, and Paul Misener.

LMDS technology and the status of frequency sharing plans for the 28 GHz band were discussed; copies of the attached materials were given to the FCC staff.

An original and two copies of this letter are enclosed. A copy of this letter (without attachments) is being provided simultaneously to Ms. Smith, Ms. Luckett, and Mr. Siddall.

Respectfully submitted,

Paul E. Misener
Counsel for Texas Instruments, Inc.

Attachments

WILEY, REIN & FIELDING

1776 K STREET, N.W.
WASHINGTON, D.C. 20006
(202) 429-7000

ROBERT PETTIT
(202) 429-7019

FACSIMILE
(202) 429-7049

May 12, 1995

HAND DELIVERY

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, NW
Washington, DC 20554

Re: Further Comments of The Boeing Company, Hughes Communications, Inc., Teledesic Corporation, and Texas Instruments, Inc.
CC Docket No. 92-297

Dear Mr. Caton:

The Boeing Company, Hughes Communications, Inc., Teledesic Corporation, and Texas Instruments, Inc., ("The Parties"), by counsel, hereby submit the following comments in the above-captioned proceeding.[1] By these comments, The Parties propose a spectrum allocation plan for the 28 GHz band to resolve this docket. The Parties believe this plan, shown in Attachment 1, satisfactorily meets the 27.5-30.0 GHz spectrum needs of the fixed-satellite service (for both non-geostationary and geostationary systems), feeder links for non-geostationary systems in the mobile-satellite service, the fixed service, and the local multipoint distribution service.

[1] To the extent deemed necessary by the Commission, The Parties hereby move the Commission to accept these comments even though they are filed outside the normal comment periods adopted by the FCC in this proceeding.

The rulemaking proceeding for this band has been underway for over two years. To resolve this docket, the Parties urge the Commission to move expeditiously to adopt the proposed allocation plan and initiate a proceeding to develop associated rules.

Respectfully Submitted,

THE BOEING COMPANY

By: Joseph P. Markoski/rep

Joseph P. Markoski
Marc Berejka
Squire, Sanders & Dempsey
1201 Pennsylvania Ave., NW
P.O. Box 407
Washington, DC 20044
Its Attorneys

HUGHES COMMUNICATIONS, INC.

By: John P. Janka/rep

John P. Janka
Latham & Watkins
1001 Pennsylvania Ave., NW
Washington, DC 20004

Its Attorney

TELEDESIC CORPORATION

By: Tom W. Davidson/rep

Tom W. Davidson, P.C.
Jennifer A. Manner
Akin Gump Strauss
Hauer & Feld, L.L.P.
1333 New Hampshire Ave., NW
Washington, DC 20036

Its Attorneys

TEXAS INSTRUMENTS, INC.

By: Robert Pettit

Robert L. Pettit
Paul E. Misener
Wiley, Rein & Fielding
1776 K Street, NW
Washington, DC 20006

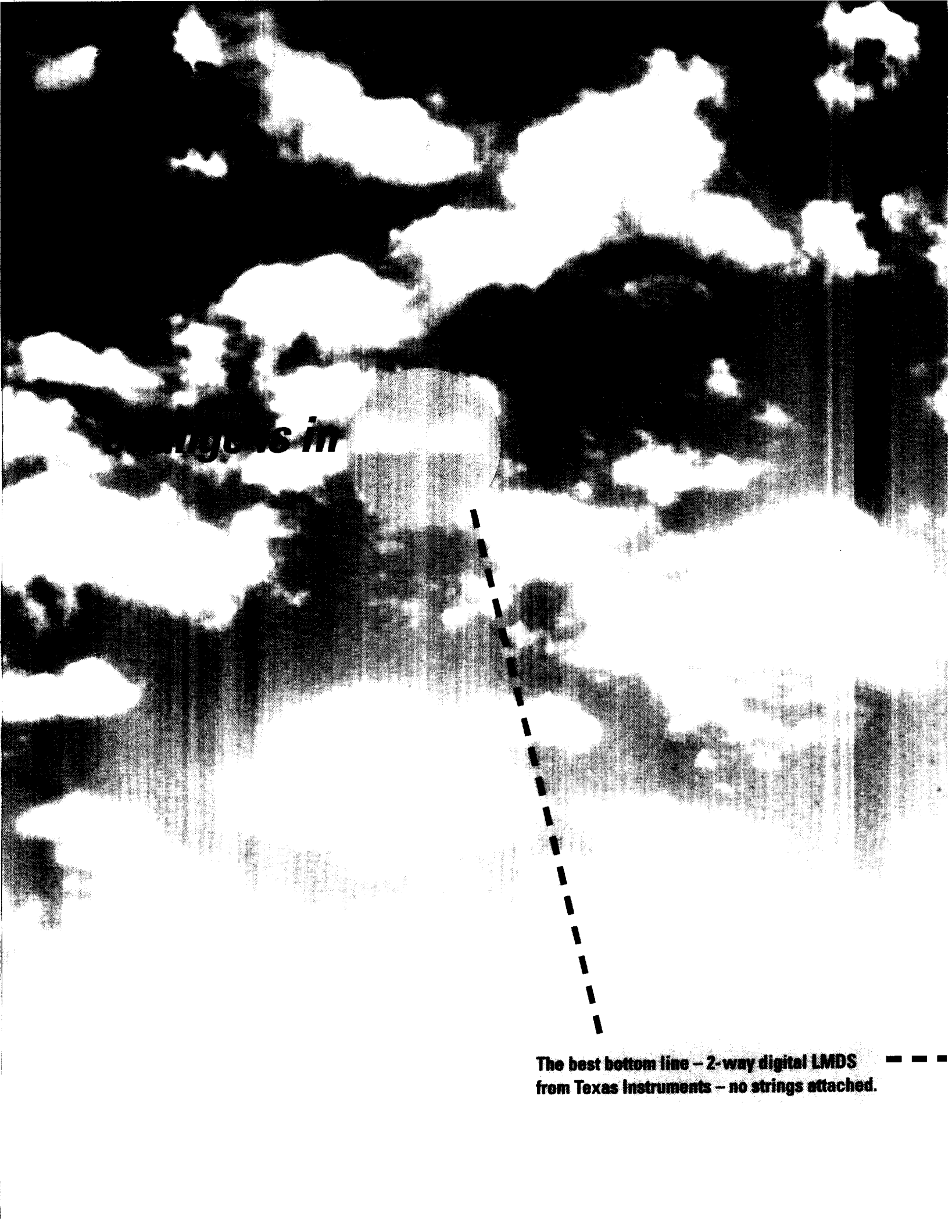
Its Attorneys

May 12, 1995

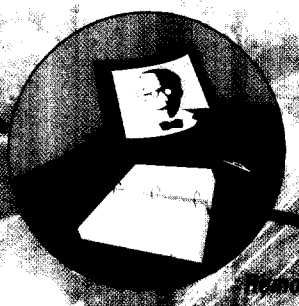
cc Chairman Reed E. Hundt
Commissioner James C. Quello
Commissioner Susan Ness
Commissioner Andrew C. Barrett
Commissioner Rachelle Chong
Robert Pepper
Thomas Tycz
Robert James
Karen Brinkmann
Lauren J. Belvin
Rudolfo M. Baca
Lisa B. Smith
Jane Mago
Jill Luckett
David R. Siddall
Mary P. McManus
Donald H. Gips
Gregory Rosston
Amy Lesch
Scott Blake Harris
Jennifer Gilsenan
Donna L. Bethea
Michael J. Marcus
Susan E. Magnotti

Attachment 1

	Services
27.5	LOCAL MULTIPOINT DISTRIBUTION SERVICE Fixed-Satellite Service
28.0	FIXED-SATELLITE SERVICE (Non-GEO) Fixed-Satellite Service (GEO) Fixed
28.5	FIXED-SATELLITE SERVICE (GEO) Fixed-Satellite Service (Non-GEO) Fixed
29.0	FIXED-SATELLITE SERVICE (Non-GEO MSS Feeder Links) LOCAL MULTIPOINT DISTRIBUTION SERVICE
29.5	FIXED-SATELLITE SERVICE (GEO) Fixed-Satellite Service (Non-GEO)
30.0	


The best bottom line – 2-way digital LMDS
from Texas Instruments – no strings attached.

Video on demand



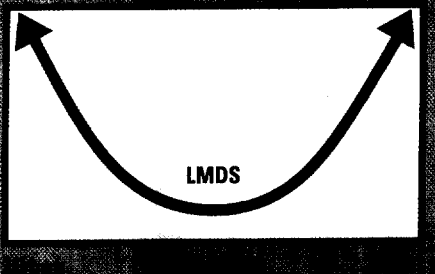
Remote education

Downtown and small town: the better solution.

In urban areas, LMDS saves you the cost of laying expensive wires down ever-more-expensive city streets. Tall buildings or existing towers provide excellent cell sites; repeaters and reflectors fill the holes and maximize coverage. Antenna transceivers can be easily interconnected using existing wiring or wireless transmission.

LMDS technology enables you to serve the needs of small towns with a single transmitter "cell." You can achieve 100 percent coverage — almost overnight — in this high-growth underserved segment.

LMDS: Best Solution for



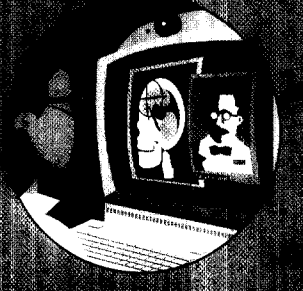
The proof is [illegible].

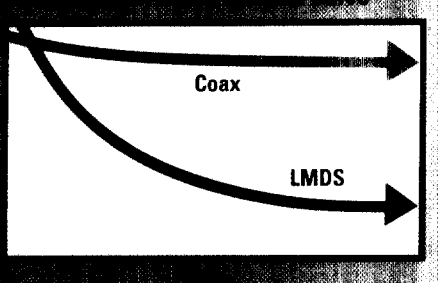
More cost-effective in the long run? Coax systems can sink up to 80 percent of installation cost in labor and raw materials, the remaining 20 percent goes for the electronics that actually run the system. LMDS inverts the numbers — with 80 percent of your valuable resources going for the electronics that will help you grow your services in the future. Which cost — labor or electronics — will come down the volume curve faster? Which option will continue to improve in performance in the future?

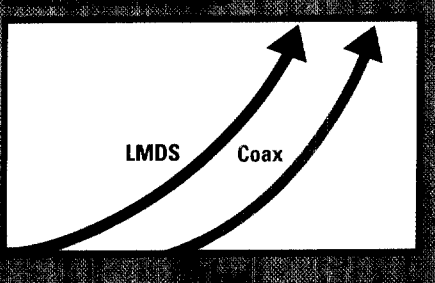
LMDS allows you to be a wireless competitive service provider. That means even less capital outlay, lower interest cost, more money available for other projects. You invest only for actual subscribers who give you revenue back.

LMDS offers even more money-saving, revenue-generating options down the road. Multiple services can be deployed over a broadband digital infrastructure. You can move it, expand it, reconfigure it, tailor it to meet the needs of your ever-changing marketplace. Lower fixed costs make you less susceptible to market fluctuations, while helping you generate higher returns from the very start.

The bottom line is, LMDS is your best way to capture early share in a booming market and gather better early revenues to offset your continued build-out. It can let you do more — with broadband capabilities designed for a wide range of revenue-generating service scenarios — video, data, telephony. It lets you do it in new, emerging, high-growth market segments. And it allows you to be economically viable at low take rates.





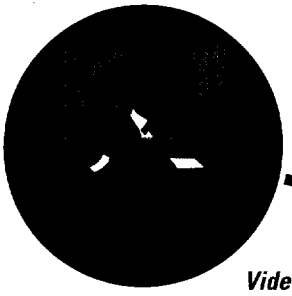


Compare for yourself. Or let us help.

At a glance, LMDS delivers significant advantages over hybrid fiber coax systems currently available.

We'll gladly help you conduct an integrated field trial. Or we can help you analyze your business model. Best yet, we can support your team with the wealth of data we've collected in our own evaluations.

	LMDS	Coax
Fixed Cost	+	-
Deployment Time	+	-
Flexibility	+	-
Variable Cost	-	+
Revenue Generation	+	-
Cash Flow	+	-
Market Share	+	-
Movability	+	-
Out-Of-Region Capable	+	-
Rural Feasibility	+	-
Urban Feasibility	+	-
Maintenance Cost	+	-
	= Advantage: LMDS	



Video conferencing

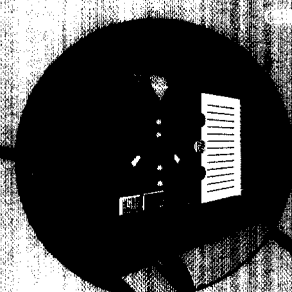
Interactive video games

Why Texas Instruments?

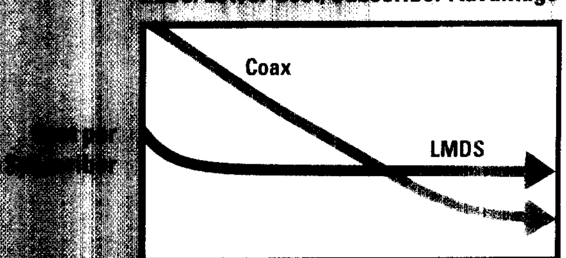
We're building on our core competencies in systems design and integration — coupled with decades of experience in advanced millimeter wave technology and unequaled experience in designing and producing broadband systems — to help you get to market first with proven, revenue-generating technologies. Our LMDS solution can help put you in the lead on the Information Superhighway now, ahead of the competition.

LMDS offers the most effective way to grow new markets — from commercial, to residential, to rural areas — where hard-wired alternatives simply aren't competitive.

LMDS is flexible. Affordable. A viable alternative to many traditional signal delivery systems. Consider LMDS for a wide variety of multiple deployment scenarios: broadcast video, wireless alternative to hybrid fiber coax for residential and small business applications, digital symmetrical broadband services to schools and hospitals. LMDS also provides fast, easy access to long distance providers, as well as having broadband campus networking capabilities.



LMDS: Lower Cost/Subscriber Advantage



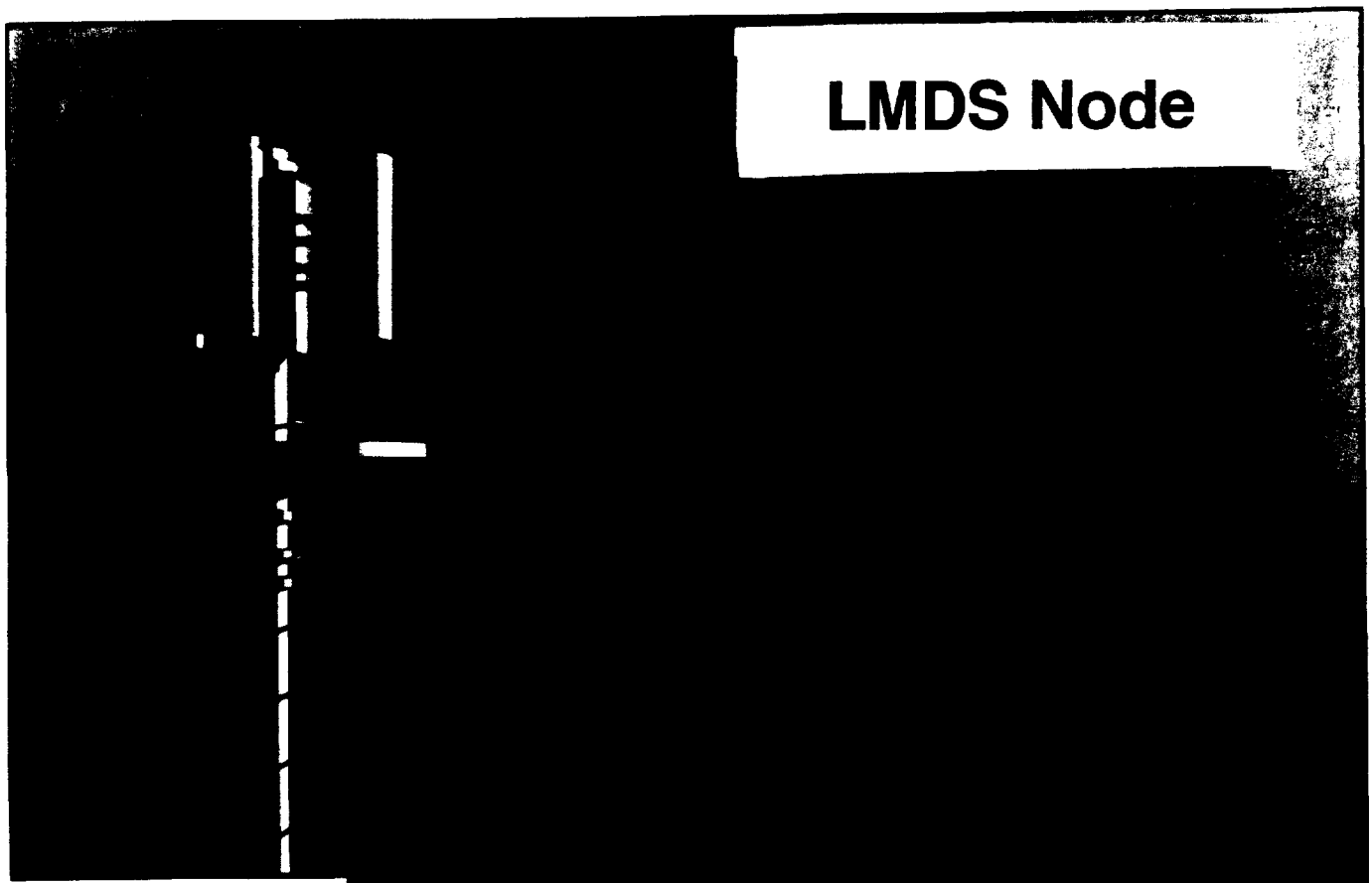
Take Rate

Texas Instruments, headquartered in Dallas, Texas, is a leading developer and manufacturer of semiconductors, defense systems, software productivity tools, consumer products, electrical controls and metallurgical materials. In addition to facilities across the continental United States, the company currently operates in more than 30 countries spanning five continents. TI's Defense Systems and Electronics Group won the 1992 Malcolm Baldrige Quality Award.

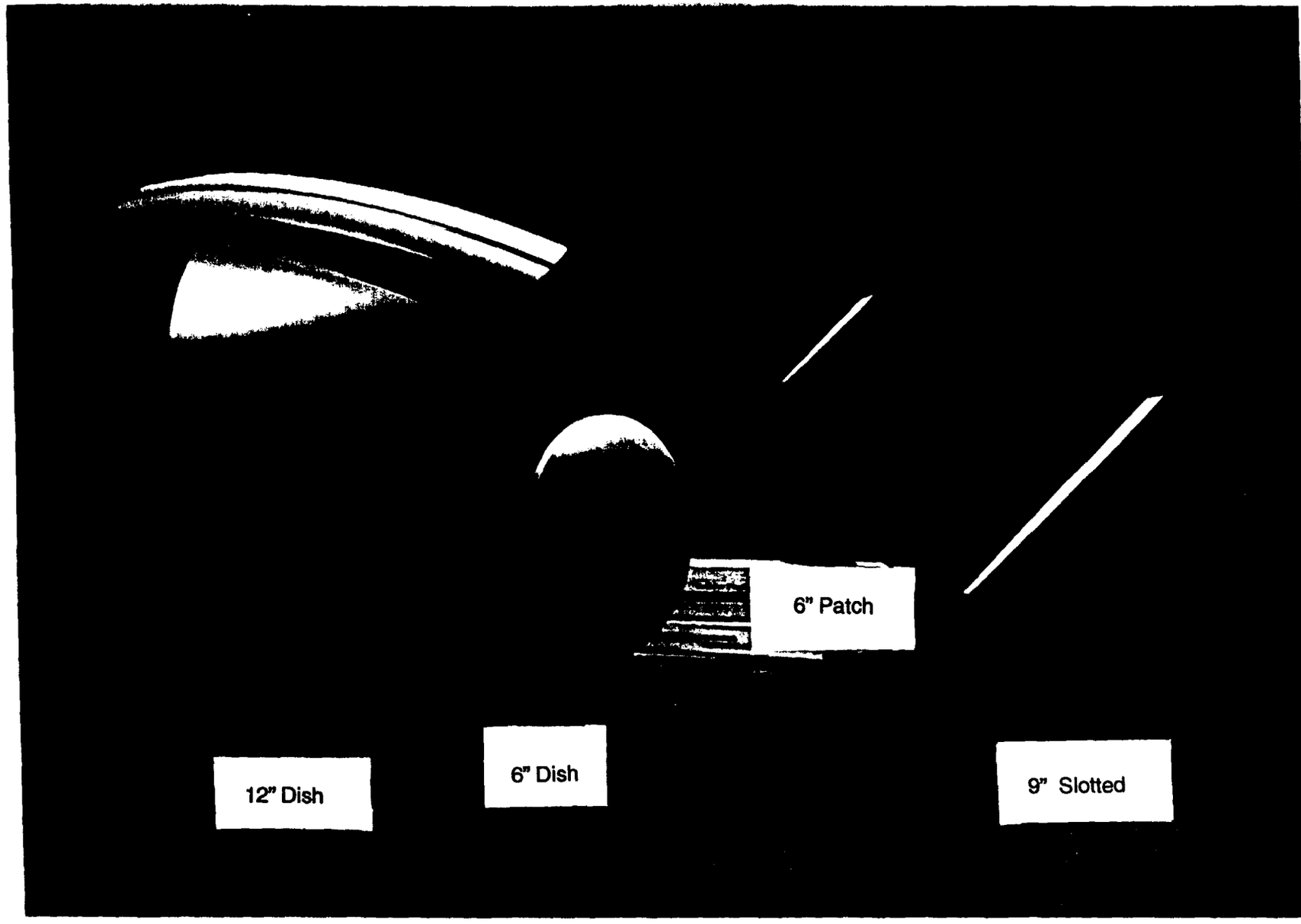
Texas Instruments

LMDS Digital System

LMDS Node



Texas Instruments

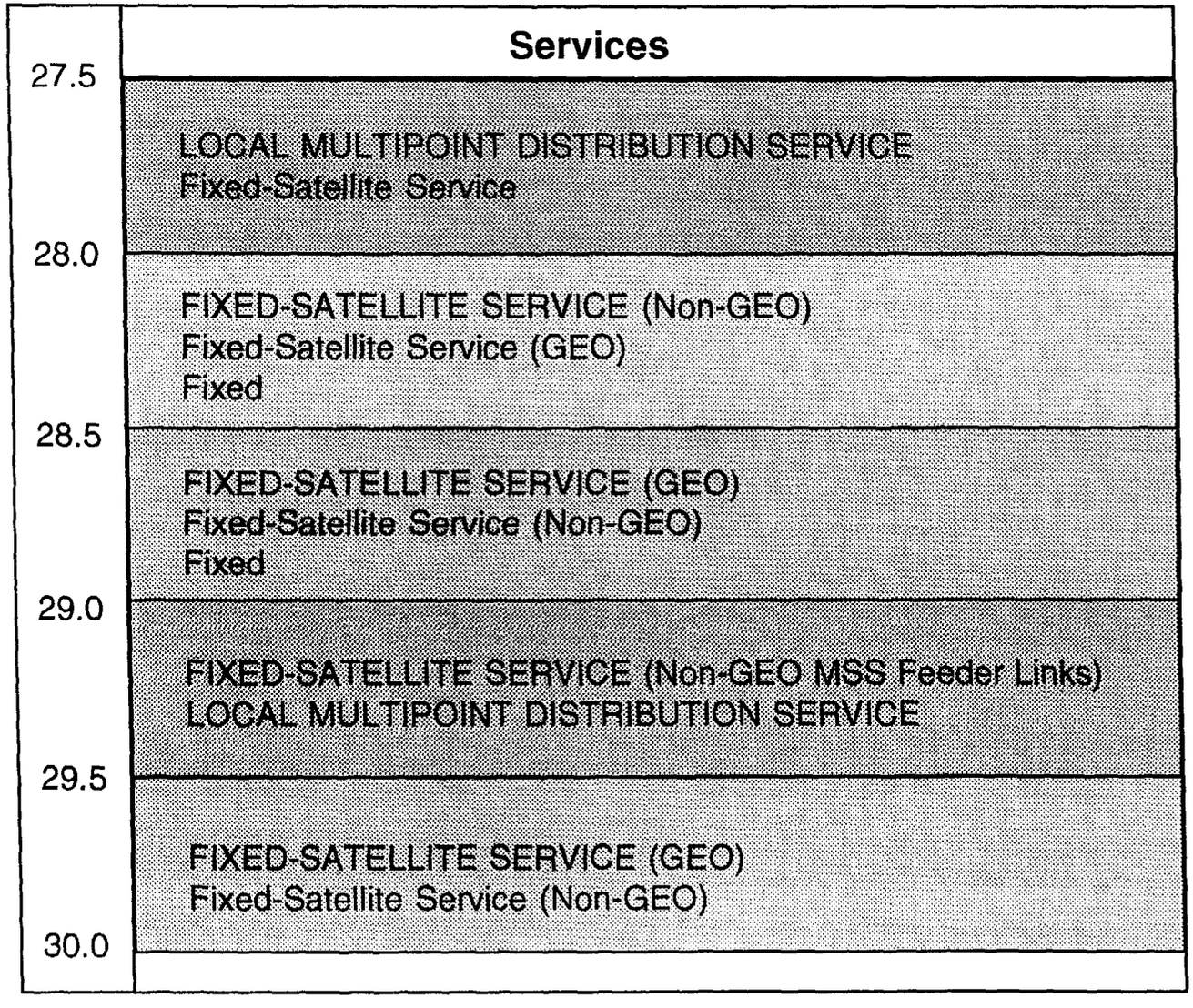


TEXAS INSTRUMENTS

BAND PLAN SUBMITTED TO FCC

- Parties proposing a spectrum allocation plan for 28 GHz band
  - The Boeing Company
  - Hughes Communications, Inc.
  - Teledesic Corporation
  - Texas Instruments Incorporated
- Band plan meets the 27.5-30.0 GHz spectrum needs of the fixed satellite service (Non-geostationary and geostationary systems), feeder links for non-geostationary systems in the mobile-satellite service, the fixed service, and the local multipoint distribution service

BAND PLAN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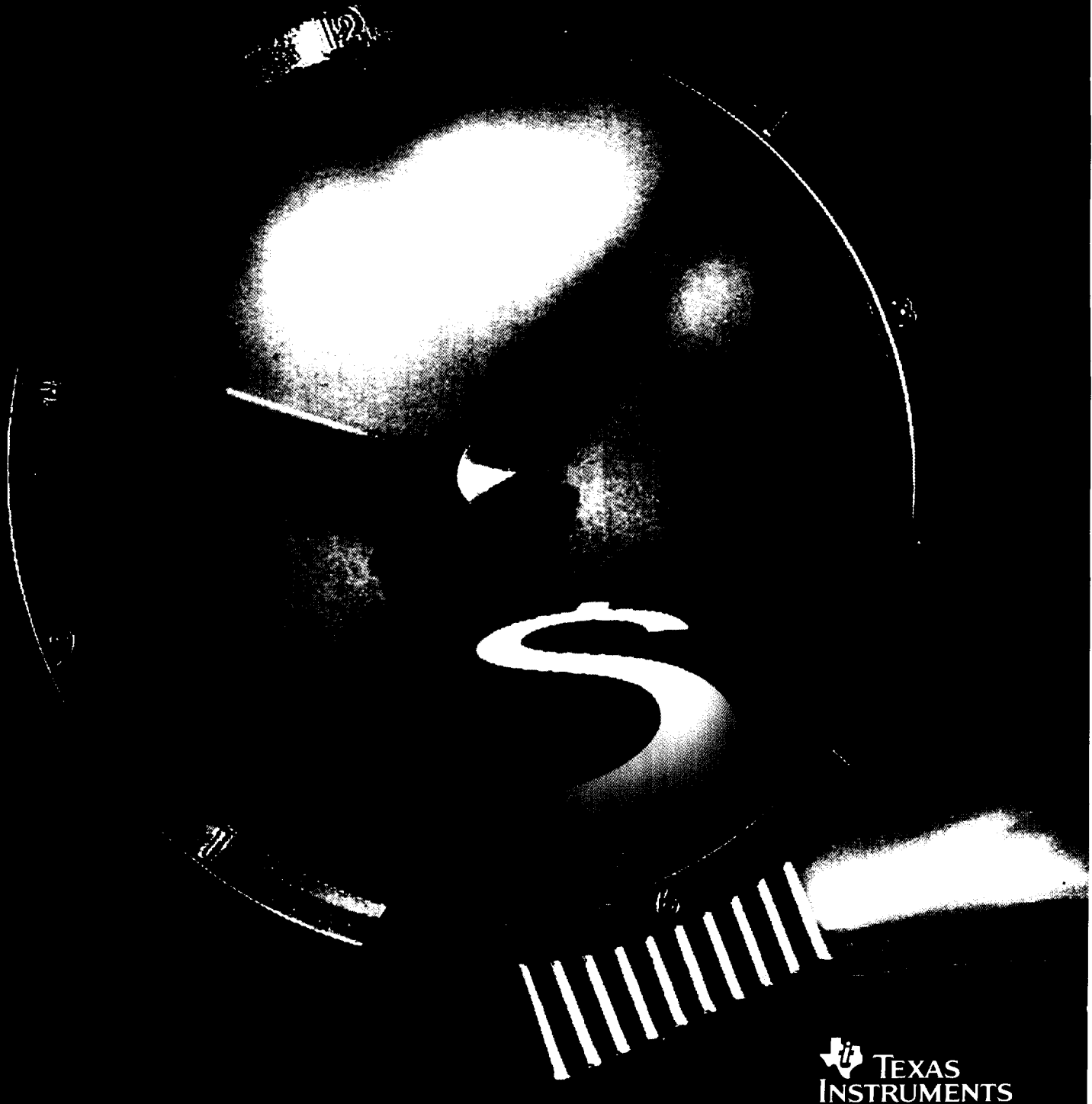
29.5
FIXED-SATELLITE SERVICE (GEO)
Fixed-Satellite Service (Non-GEO)
30.0

Change is in the Air

The market for video and interactive services is changing — fast. TI technologies can get you there ahead of the wave.



Texas Instruments

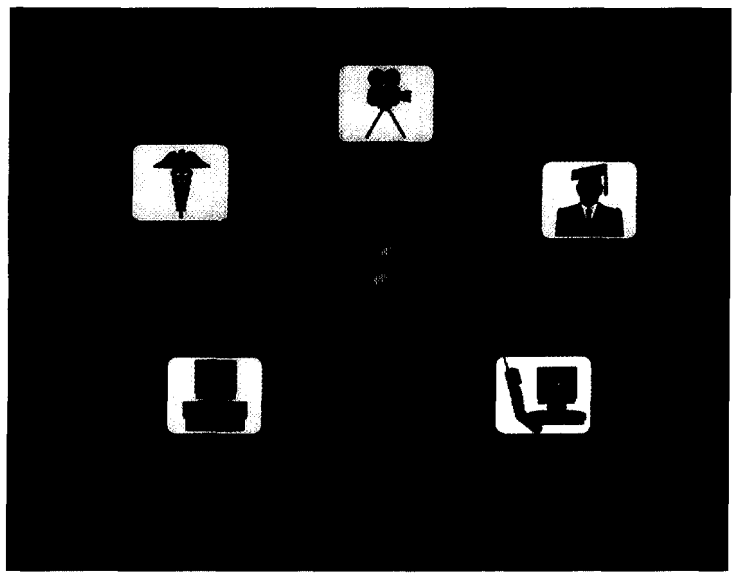
Imagine the living room of the ***not-too-distant future****. Two-way, multimedia, interactive video—all based on broadband interactive technologies—will drive the way consumers send, receive and use information. Videotelephones. Long-distance learning. Movies on demand. Telecommuting. Networked healthcare. And more.*

Your task is to get to market ***first*** *with the right solution.*

Local Multipoint Distribution Services (LMDS) technology from Texas Instruments can make it all happen ***faster****. With finely tuned broadband technologies that have the capability to do much more than coax cable, and combine the features of* ***low-cost system start-up*** *with lots of room to grow.*

An alternative to hybrid fiber coax.

The Information Superhighway is just around the next bend—an era when massive amounts of information will travel to and from homes and businesses instantaneously. We've seen the rapid spread of cellular and wireless technologies. It points the way to the future—without the limitations of laying or hanging expensive cable. Texas Instruments has long been at the forefront of microwave and advanced antenna technologies. The capability exists now to couple our know-how with your needs for broadband interactive communications—often leveraging your existing tower and network assets—for a **fraction of the cost** of hybrid fiber coax.



TI's interactive broadband LMDS provides Information Superhighway revenues. First.

With TI, you can be in the wireless broadband business **fast**. And you can save money.

Whoever gets there first with the most wins.

The technologies that will drive the Information Superhighway are rapidly taking shape. They will be flexible, expandable. And digital. Providers who get to market with proven broadband capabilities **first** can gain a leadership position quickly. Then defend it against new competitors.

The speed of deployment provided by LMDS can be the key to getting you set up and firmly established as a preferred provider of information to the home or office. In markets that are expected to expand tremendously over the next few years.

Why Texas Instruments?

We're building on our core competencies in systems design and integration—coupled with decades of experience in advanced microwave technology and unequaled experience in designing and producing 28 GHz components—to enable you to get to market first with the most. Our LMDS solution can provide you with Information Superhighway revenues—first. Ahead of the competition.

We combine consumer know-how with technical competence, a vast global base of resources, and a focus on quality that recently earned our defense group the coveted Malcolm Baldrige National Quality Award.

Add to that our traditional strengths in complex systems integration—the capabilities behind LMDS systems—and we become the logical technology partner.

Let's talk change.

Let us show you how LMDS technology from TI can get you to market with broadband communications capabilities in time for the coming change. For lower cost than hybrid fiber coax.

For more information, call or write to:
Texas Instruments
7839 Churchill Way, MS 3933
Dallas, Texas 75251
214-917-1528